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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,941	10/30/2003	Klaus-Dieter Hammer	22135-00017-US	6279
59554 7590 05/08/2007 Womble Carlyle Sandridge & Rice, PLLC Attn: Patent Docketing 32nd Floor P.O. Box 7037 Atlanta, GA 30357-0037			EXAMINER O HERN, BRENT T	
			ART UNIT 1772	PAPER NUMBER
			MAIL DATE 05/08/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/695,941	Applicant(s) HAMMER ET AL.	
	Examiner Brent T. O'Hern	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-9, 11-13 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9, 11-13 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 13 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9 April 2007 has been entered.

Claims

2. Claims 1-4, 6-9, 11-13 and 15-19 are pending.

WITHDRAWN OBJECTIONS

3. The objection to claim #10 in the Office Action mailed 8 December 2006, page 3, paragraph 9 has been withdrawn due to Applicant's amendments in the Paper filed 9 April 2007.

WITHDRAWN REJECTIONS

4. The 35 U.S.C. 112 rejections of claim 12 of record in the Office Action mailed 8 December 2006, page 3, paragraph 6 has been withdrawn due to Applicant's amendments in the Paper filed 9 April 2007.

5. The 35 U.S.C. 102(b) rejections of claims 8-9, 15 and 17-18 as being anticipated by Hammer et al. (US 5,501,886) of record in the Office Action mailed 8 December 2006, page 3, paragraph 7 have been withdrawn due to Applicant's amendments in the Paper filed 9 April 2007.

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6. The 35 U.S.C. 103(a) rejections of claim 13 as being obvious over Hammer et al. (US 5,501,886) in view of Crevasse (US 5,215,495) of record in the Office Action mailed 8 December 2006, page 3, paragraph 8 have been withdrawn due to Applicant's amendments in the Paper filed 9 April 2007.

7. The 35 U.S.C. 102(b) rejections of claims 1-4, 6-7, 10-12 and 19 as being anticipated by Hammer et al. (US 5,501,886) of record in the Office Action mailed 8 December 2006, page 3, paragraph 10 have been withdrawn due to Applicant's amendments in the Paper filed 9 April 2007.

8. The 35 U.S.C. 103(a) rejections of claim 16 as being unpatentable over Hammer et al. (US 5,501,886) in view of Crevasse (US 5,215,495) of record in the Office Action mailed 8 December 2006, page 5, paragraph 11 have been withdrawn due to Applicant's amendments in the Paper filed 9 April 2007.

NEW OBJECTIONS

Claim Objections

9. Claims 13 and 17 are objected to because of the following informalities: the original claims contain the term "**shirred**" in lines 1-2, however, the pending claims contain the term "**shined**" with the status identifiers stating "**original**". Applicant appears to have mistakenly transposed this term. Appropriate correction is required.

NEW REJECTIONS

Claim Rejections - 35 USC § 103

10. Claims 1-4, 6-12, 15, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer et al. (US 5,501,886) in view of Borodaev et al. (WO 02/078455).

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Regarding claims 1 and 12, Hammer ('886) teaches a seamless tubular food casing comprising at least one copolymer comprising units of vinylpyrrolidone and units of at least one comonomer (*See Abs., ll. 1-6 and col. 4, l. 22 to col. 6, l. 2, specifically vinylpyrrolidone as illustrate in Formula-I and at least one comonomer.*), and an admixture of cellulose hydrate (*col. 6, ll. 29-51*) and an unsaturated carboxylic acid (*See col. 5, ll. 23-55 and col. 8, ll. 15-28*), however, fails to expressly disclose wherein a comonomer being selected from the group consisting of vinyl alkanoate, vinyl alkyl ether, conjugated alkadiene, acrylamide and α , β -ethylenically unsaturated carboxylic acid.

However, Borodaev ('455) teaches wherein the casing comprises a copolymer with units of vinylpyrrolidone and α , β -ethylenically unsaturated carboxylic acid (*See p. 4, ll. 21-25*) for the purpose of providing a film with good mechanical properties (*See p. 4, ll. 6-8*).

Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to substitute Hammer's ('886) unsaturated carboxylic acid with the α , β -ethylenically unsaturated carboxylic acid as taught by Borodaev ('455) in order to provide a film with good mechanical properties.

Regarding claims 2-4, Hammer ('886) teaches a casing wherein the weight ratio of the copolymer to cellulose is from 1:25 to 10:1, which equates to 10-96% for claim #2/(1:5 to 5:1, which equates to 17-83% for claim #3)/(1:4 to 4:1, which equates to 20-80% for claim #4) (*See col. 6, ll. 37-51 wherein Hammer's ('886) from 0.1 to 100% as specifically stated in l. 46 clearly falls within all of the above claimed proportions, with corresponding percentage equivalents.*).

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Regarding claims 6-7, Hammer ('886) teaches a casing wherein the proportion of comonomer units is less than 50 mol %/(30 mol %) based on the sum of all monomer and comonomer units in the copolymer (*See col. 6, ll. 29-51 and ll. 8-10, specifically l. 46 wherein the weight % is as low as 0.1% for a mean molecular weight from 500,000-1,500,000 is clearly less than 30%/50%.*).

Regarding claim 8, Hammer ('886) teaches a casing comprising a fiber reinforcement (*col. 5, l. 12*).

Regarding claim 9, Hammer ('886) teaches a casing wherein the fiber reinforcement comprises a hemp fiber paper (*col. 10, l. 66*).

Regarding claim 11, Hammer ('886) teaches a casing wherein the copolymer is a mixture with the cellulose hydrate comprises a layer on the outside of the fiber reinforcement (*See col. 10, l. 66 to col. 11, l. 16 wherein the hemp is coated with the cellulose hydrate and col. 4, ll. 23-67 and col. 2, ll. 51-64 wherein the cellulose hydrate is disclosed.*).

Regarding claim 12, Hammer ('886) teaches a casing wherein the copolymer is present in an amount sufficient to inhibit or suppress mold growth (*See col. 6, ll. 29-51 wherein the amount of copolymer can be varied and a person having ordinary skill in the art would know that said varied amount is sufficient to suppress mold growth. Furthermore, the Examiner interprets any amounts of copolymer to be sufficient.*).

Regarding claim 15, Hammer ('886) teaches an artificial sausage comprising a food casing (*col. 1, l. 9*).

Regarding claim 17, Hammer ('886) teaches a shirred stick (*col. 10, ll. 57-60*).

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Regarding claim 18, Hammer ('886) teaches a food casing comprising cellulose and an additive wherein the presence of the additive is in amount sufficient to achieve, as compared to a food casing comprising cellulose without the additive: (i) lower permeation while water vapor permeability is preserved (*See col. 7, ll. 15-18 and col. 8, ll. 15-38 wherein the cellulose, the additive and the processing parameters can be varied to provide lower permeation depending on the requirements of use.*).

Regarding claim 19, Hammer ('886) teaches a casing wherein the additive comprises a polyvinylpyrrolidone (*See Abs., ll. 1-6 and col. 4, ll. 23-37.*).

Claim Rejections - 35 USC § 103

11. Claims 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer et al. (US 5,501,886) in view of Borodaev et al. (WO 02/078455) and Crevasse (US 5,215,495).

Regarding claim 13, Hammer ('886) and Borodaev ('455) teach the casing discussed above and Hammer ('886) teaches wherein the casing is shirred to form a shirred stick (*col. 10, l. 56*), however, fail to expressly disclose a length from 5 to 100 m.

However, Crevasse ('495) teaches a length from 5 to 100 m (*col. 3, ll. 56-59*) for the purpose of encasing a large number of sausages (*col. 3, ll. 58-59*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to modify Hammer's ('886) casing with a shirred stick from 5 to 100 m as taught by Crevasse ('495) in order to provide encasing for a large number of sausages.

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Regarding claim 16, Hammer ('886) and Borodaev ('455) teach the casing discussed above, however, fail to expressly disclose a sausage comprising a food casing.

However, Crevasse ('495) teaches a dry sausage comprising a food casing (*Abs.*, I. 2) for the purpose of providing encased sausage with long shelf life (*col.* 4, II. 65-68).

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to modify Hammer's ('886) casing with encased sausage as taught by Crevasse ('495) in order to provide encased sausage having a long shelf life.

ANSWERS TO APPLICANT'S ARGUMENTS

12. In response to Applicant's argument (*p. 6, para. 2 of Applicant's Paper filed 9 April 2007*) that the terms "inhibit or suppress" are not vague and indefinite, it is noted, that Applicant's argument are persuasive and as discussed above the Examiner interprets any amounts sufficient to inhibit or suppress.

13. In response to Applicant's argument (*p. 6, para. 4 to p. 7, para. 3 of Applicant's Paper filed 9 April 2007*) that Hammer ('886) does not teach independent claim #1 because formulas II and III of Hammer ('886) contain amino- or ammonium groups, it is noted that Applicant's argument is persuasive and the 35 USC 102 rejections have been withdrawn.

14. In response to Applicant's argument (*p. 7, para. 3 of Applicant's Paper filed 9 April 2007*) that Hammer ('886) does not anticipate claims 18-19 because Hammer ('886) teaches improved permeation and absorption capacity, it is noted as discussed

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above that the cellulose, the additive and the processing parameters can be varied to provide lower permeation depending on the requirements of use (*See col. 7, ll. 15-18 and col. 8, ll. 15-38 wherein*).

15. In response to Applicant's argument (*p. 7, para. 4 to p. 8, para. 4 of Applicant's Paper filed 9 April 2007*) that Hammer ('886) and Crevasse ('495) do not teach claims 13 and 16, it is noted that Applicant's statements are conclusory and Applicant has not provided any analysis regarding any of the issues at bar with respect to claims 13 and 16.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571) 272-0496. The examiner can normally be reached on M-F, 9:00-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-2172. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Brent T O'Hern
Examiner
Art Unit 1772
May 4, 2007


NASSER AHMAD
PRIMARY EXAMINER
5/6/07